

# ALEXANDER WILLIAMS

## Software Engineer

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in ak97williams

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## EDUCATION

### Electrical Engineering

#### University of Pittsburgh

📅 Sep 2015 - Apr 2019

- Concentration in Electric Power
- Computer Science Minor
- Mathematics Minor
- GPA: 3.55

## EXPERIENCE

### Software Engineer

#### Netronome

📅 June 2019 - Present

📍 Pittsburgh, PA

- Worked on developing tests using python and microcode used in network interface cards
- Expanded the scope of Netronome's automated testing environment to streamline the software development process

### Electrical and Automation Intern

#### SMS Group

📅 Jan 2018 - May 2018

📍 Pittsburgh, PA

- Worked on programmable logic controllers to control steel rolling mills
- Reviewed and developed CAD drawings
- Designed and programmed human machine interfaces

At SMS Group I experienced working on a multi-person project within a company from start to finish. We worked on an upgrade for an old HMI at a Steel Mill. I was involved with the upgrade team in the HMI, the PLC, and also setting up and testing the equipment.

I also gained experience interacting directly with the client, having the opportunity to do an on site visit and see how the different engineers from three separate companies coordinate with each other.

### Computer Engineering Intern

#### Coredial

📅 May 2017 - Aug 2017

📍 Bluebell, PA

- Worked on Server Maintenance
- Designed and built screen sharing website using Django back-end

During my time at Coredial I first experienced working on a long term several month project. I learned to operate within a team of engineers and use source control to collaborate together.

At the end of my internship at Coredial I gave a presentation to managers and project leaders illustrating the work I had done during my time there.

## PHILOSOPHY

*No amount of brilliant planning or ingenious scheduling can substitute for sitting down and working*

## MOST PROUD OF



### Perseverance

Finishing my first marathon was an extraordinary challenge where I had to press on through pain and exhaustion I had never before experienced



### Leadership

Throughout my time in college I have come to hold numerous positions of leadership in clubs I am involved with

## SKILLS

Java

Python

Django

Orcad

Matlab

C

Embedded Systems

Statistical Analysis

MicroCode

LaTeX

Communication

Leadership

Listening

Public Speaking

## Research

### University of Pittsburgh

📅 May 2018 - Present

- Continued ongoing research for current load analysis project using Matlab
- Worked under Professor Kerestes to improve non-intrusive electrical load detection using simulations and real data

## Senior Design Project

### University of Pittsburgh

📅 Sep 2018 - Dec 2018

- Built project Sponsored by Eaton to develop wireless transmitter for circuit breakers
- Transmitter would use Wi-Fi to send electrical current information from breaker to remote server
- My focus was on the embedded programming of the chip we designed

## EXTRACURRICULAR

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## Parliamentarian

### Phi Sigma Pi Honor Fraternity

📅 May 2018 - Apr 2019

- Manage online tracking system to oversee how all brothers fulfill obligations
- Lead debate with Pi events and manage bylaws
- Communicate disciplinary action with brothers when necessary

## Fundraising Chair

### Phi Sigma Pi Honor Fraternity

📅 Dec 2017 - May 2018

- Created and planned various events to fundraise money for fraternity
- Oversaw all fundraising events from inception to completion
- Worked with treasurer to budget pi events

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## Project Lead

### Design Hub

📅 Jan 2018 - Apr 2019

Design hub is a club that works with groups around Pittsburgh to solve engineering problems.

Over the past year I have worked with a team coordinating with an ENT surgeon to create an enclosed saline heating and dispensing system. We spent time researching the various restrictions that accompany working in the biomedical field, and spent time experimenting with different design concepts to find a solution that works well for the surgeon. Currently we are working on a fully functioning prototype to be completed this semester.

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## Vice President

### Shotokan Karate Club

📅 Dec 2015 - Dec 2016

- In charge of new member outreach and coordination with Student Organization Resource Center for event planning
- Regularly participated in martial arts for 14 years